

AMENDMENT(S) TO THE SPECIFICATION

Please substitute the following paragraph for the paragraph beginning on page 5, line 6:

The above-mentioned and other features and advantages of this invention, and the manner of attaining them, will become more apparent and the invention will be better understood by reference to the following description of an embodiment of the invention taken in conjunction with the accompanying drawings, wherein:

Fig. 1 is a simplified side, sectional view of an EP printer which may be used to carry out an embodiment of the method of the present invention;

Fig. 2 is a schematic, side view of a portion of the paper transport assembly, fuser and electrical circuit of the EP printer shown in Fig. 1;

Fig. 3 is a graphical illustration of pulse width modulation settings corresponding to load on a fuser motor, at a fuser speed of approximately 104.991 mm/sec.;

Fig. 4 is a graphical illustration of pulse width modulation settings corresponding to load on a fuser motor, at a fuser speed of approximately 106.647 mm/sec.;

Fig. 5 is a graphical illustration of pulse width modulation settings corresponding to load on a fuser motor, at a fuser speed of approximately 107.030 mm/sec.;

Fig. 6 is a graphical illustration of pulse width modulation settings corresponding to load on a fuser motor, at a fuser speed of approximately 107.284 mm/sec.;

Fig. 7 is a graphical illustration of pulse width modulation settings corresponding to load on a fuser motor, at a fuser speed of approximately 107.540 mm/sec.;

Fig. 8 is a graphical illustration of a linear regression data fit to determine an approximate matching speed between the fuser and transport belt[.];

Figs. 9A-10 are flowcharts illustrating an embodiment of a method according to the present invention;

Figs. 11A-11C are flowcharts illustrating another embodiment of a method according to the present invention; and

Fig. 12 is a flowchart illustrating another embodiment of a method according to the present invention.

Please add the following three paragraphs after the paragraph beginning on page 12, line 10:

With reference to Figs. 9A-10, the present invention discloses a method of determining a relative speed between two separately driven members in an image forming apparatus, including the steps of: transporting (S100) a print medium using a print media transport assembly including a first nip, the print media transport assembly operable at a first transport speed; driving (S110) a rotatable member associated with a second nip using an electric motor at a second transport speed which is independent from the first transport speed; transferring (S120) the print medium between the first nip and the second nip; detecting (S130) an electrical characteristic of the motor when the print medium is present in each of the first nip and the second nip; and determining (S140) a relative speed between the first transport speed and the second transport speed. The method can further include the steps of, prior to the determining step (S140): transporting (S150) an other print medium using the print media transport assembly at the first transport speed; driving (S160) the rotatable member using the electric motor at a third transport speed which is different from the second transport speed; transferring (S170) the other print medium between the first nip and the second nip; detecting (S180) the electrical characteristic of the motor when the print medium is present in each of the first nip and the second nip; and comparing (S190) the electrical characteristic from the second detecting step with the electrical characteristic from the first detecting step; wherein the determining step (S140) is dependent upon the comparing step (S190).

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The method can include the step of setting (S112) the second transport speed at a predetermined value below the first transport speed. The second transport speed can be set in step S112 at a value which is approximately 0.75% less than the first transport speed. The detecting step (S130) can include the substeps of: monitoring (S132) a pulse width modulation setting of the motor; and detecting (S134) a rise in the pulse width modulation setting associated with the second transport speed being faster than the first transport speed. The method can further include the substep of setting (S136) a threshold value for the rise in pulse width modulation setting. The threshold value can be set in step S136 at an approximately 15% rise in the pulse width modulation setting.

With reference to Figs. 11A-11C, the present invention discloses a method of operating an image forming apparatus, including the steps of: transporting (S200) a first print medium, comprising the substeps of: transporting (S202) the first print medium using a print media transport assembly at a first transport speed to a first nip; transporting (S204) the first print medium to a second nip at a second transport speed associated with an electric motor, the second transport speed being independent from the first transport speed; detecting (S206) an electrical characteristic of the motor when the first print medium is present in each of the first nip and the second nip; and transporting (S210) a second print medium, including the substeps of: transporting (S212) the second print medium using the print media transport assembly at the first transport speed to the first nip; transporting (S214) the second print medium to the second nip at a third transport speed associated with the electric motor, the third transport speed being independent from the first transport speed; detecting (S216) an electrical characteristic of the motor when the second print medium is present in each of the first nip and the second nip; comparing (S220) the electrical characteristic from the second detecting step (S216) with the electrical characteristic from the first detecting step (S206); determining (S230) whether at least one of the second transport speed and the third transport speed is faster than the first transport

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speed. The method can include the step of setting (S240) the second transport speed at a predetermined value below the first transport speed. The second transport speed can be set in step S240 at a value which is approximately 0.75% less than the first transport speed. The detecting steps can include the substeps (S260) of: monitoring (S262) a pulse width modulation setting of the motor; and detecting (S264) a rise in the pulse width modulation setting. The method further include the substep of setting (S266) a threshold value for the rise in pulse width modulation setting. The threshold value can be set in step S266 at a 15% rise in the pulse width modulation setting.

With reference to Fig. 12, the present invention discloses a method of operating an electrophotographic printer, including the steps of: transporting (S270) a print medium through a first nip at a first transport speed using a first rotatable member; driving (S280) a second rotatable member associated with a second nip using an electric motor at a second transport speed which is independent from the first transport speed; transferring (S290) the print medium between the first nip and the second nip; and detecting (S300) an electrical characteristic of the motor when the print medium is present in the second nip.